

Efficacy of Collagen Matrix Implants in Phacotrabeculectomy with Mitomycin C at One Year

Authors : Lalit Tejwani, Reetika Sharma, Arun Singhvi, Himanshu Shekhar

Abstract : Purpose: To assess the efficacy of collagen matrix implant (Ologen) in phacotrabeculectomy augmented with mitomycin C (MMC). Methods: A biodegradable collagen matrix (Ologen) was placed in the subconjunctival and subscleral space in twenty-two eyes of 22 patients with glaucoma and cataract who underwent combined phacoemulsification and trabeculectomy augmented with MMC. All of them were examined preoperatively and on the first postoperative day. They were followed for twelve months after surgery. Any intervention needed in follow-up period was noted. Any complication was recorded. The primary outcome measure was postoperative intraocular pressure at one year follow-up. Any additional postoperative treatments needed and adverse events were noted. Results: The mean age of patients included in the study was 57.77 ± 9.68 years (range=36 to 70 years). All the patients were followed for at least one year. Three patients had history of failed trabeculectomy. Fifteen patients had chronic angle closure glaucoma with cataract, five had primary open angle glaucoma with cataract, one had uveitic glaucoma with cataract, and one had juvenile open angle glaucoma with cataract. Mean preoperative IOP was 32.63 ± 8.29 mm Hg, eighteen patients were on oral antiglaucoma medicines. The mean postoperative IOP was 10.09 ± 2.65 mm Hg at three months, 10.36 ± 2.19 mm Hg at six months and 11.36 ± 2.72 mm Hg at one year follow up. No adverse effect related to Ologen was seen. Anterior chamber reformation was done in five patients, and three needed needling of bleb. Four patients needed additional antiglaucoma medications in the follow-up period. Conclusions: Combined phacotrabeculectomy with MMC with Ologen implantation appears to be a safe and effective option in glaucoma patients needing trabeculectomy with significant cataract. Comparative studies with longer duration of follow-up in larger number of patients are needed.

Keywords : combined surgery, ologen, phacotrabeculectomy, success

Conference Title : ICGS 2017 : International Conference on Glaucoma Surgery

Conference Location : London, United Kingdom

Conference Dates : September 21-22, 2017